



General Administration  
STATE OF WASHINGTON



# **GA Sustainability Progress Report 2009**

## Message from the Director



General Administration is committed to taking a leading role in helping state government reduce its impact on the environment. We will continue to promote sustainability in the design and construction of public facilities and the operation of state services.

Our partnerships help ensure a more sustainable future for all Washington residents.

Linda Villegas Bremer  
Director  
December 31, 2009

General Administration is a central support agency for state government. Our customers include state agencies, city and county government, school districts, colleges and universities, and a number of nonprofit organizations.

### What we do:

- Oversee more than \$400 million of contracts annually for a multitude of services and commodities.
- Provide solutions in managing supplies, logistics and warehousing services.
- Manage more than \$500 million annually in the design and construction of public buildings. The department has a lead role in promoting and developing "green" building practices in Washington.
- Conserve energy and utility costs for public agencies statewide by using Energy Savings Performance Contracting. Serve as a real estate agent for state agencies, arranging leases for office, warehouse and other space throughout Washington.
- Deliver about 63 million pieces of mail annually as manager of the state's internal mail service.
- Run a Motor Pool fleet of nearly 1,800 vehicles, offering hundreds of fuel-efficient, low-emission hybrids to state agency customers.
- Welcome more than 300,000 visitors each year to the historic buildings and grounds of the Capitol Campus in Olympia.
- Recycle and find second use for surplus public agency goods, keeping more than 235 tons of materials out of landfills annually.
- Support sustainable practices in government.

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## Contact Information

<b>GA Director:</b>	<b>Linda Villegas Bremer</b> (360) 902-7300		
<b>Executive Sponsor:</b>	<b>Martin Casey, Performance and Accountability Director</b> (360) 902-7225 <a href="mailto:mcasey@ga.wa.gov">mcasey@ga.wa.gov</a>		
<b>Program Manager:</b>	<b>Roger Wigfield, Energy Program Manager</b> (360) 902-7198 <a href="mailto:rwigfie@ga.wa.gov">rwigfie@ga.wa.gov</a>	<b>Sustainability Coordinator:</b>	<b>Stuart Simpson, Sustainable Building Advisor</b> (360) 902-7199 <a href="mailto:ssimpso@ga.wa.gov">ssimpso@ga.wa.gov</a>
	<b>General Administration</b> PO Box 41012 Olympia, WA 98504-1012	<b>Report assembled by:</b>	<b>Kathi Fyfe, Program Analyst</b> (360) 902-7224 <a href="mailto:kfyfe@ga.wa.gov">kfyfe@ga.wa.gov</a>

# Green Buildings

## Goal 1

GA is the lead agency in implementing the state's Green Building law.

- Two projects required to meet LEED Silver achieved LEED Gold.
- Fourteen projects are pending LEED certification for FY09

### Implement sustainable building practices

Agency Objectives /Targets	Progress to Date (Measurables)
<b>1.1</b> 5% of GA-managed, state-owned new construction and major remodel projects will be LEED Gold certified (Leadership in Energy and Environmental Design: U.S. Green Building Council national design guidelines).	12% achieved LEED Gold Projects Include: <ul style="list-style-type: none"> <li>• Sn-w'ey'-mn Building Auditorium, Spokane Falls CC.</li> <li>• Early Learning Center, Tacoma CC</li> </ul>
<b>1.2</b> 5% of new and major (more than 30,000 sq. ft.) remodel leased projects will be LEED Silver certified.	100% achieved LEED Certified Projects Include: <ul style="list-style-type: none"> <li>• One new project was certified LEED Gold: Parsons Plaza (State Parks).</li> </ul>
<b>1.3</b> Achieve LEED EB Silver rating for all existing buildings on the Capitol Campus (more than 10,000 sq.ft.) by 2015.	<ul style="list-style-type: none"> <li>• LEED EB plan for campus under development. Data being collected to identify building for pilot project in June, 2010.</li> </ul>

### State Owned, GA Managed Buildings - Remodeled or New Construction

Year (FY)	2003	2004	2005	2006	2007	2008	2009
Non-LEED Buildings	14	18	27	14	15	20	1
LEED Silver	-	-	1	-	-	-	8*
LEED Gold or Higher	-	1	-	-	-	-	2/6*
<b>Total</b>	<b>14</b>	<b>19</b>	<b>28</b>	<b>14</b>	<b>-</b>	<b>-</b>	<b>17</b>
% LEED Buildings	0%	6%	4%	0%	0%	0%	12%

**Comments:** In 2009, GA completed 17 buildings. Of those, two projects achieved LEED Gold, six more are pursuing LEED gold, and eight are pursuing LEED Silver certification. One project was exempted as "not practicable" (DOC projects are excluded from GA's report because they are included in DOC's sustainability report).



### **Progress to Date:**

- GA has integrated LEED requirements and processes into project management guidelines and instructions for state-owned buildings. GA is also incorporating these requirements into the lease building specifications and process.
- GA is working with the Department of Ecology (DOE) to provide free *Build-it LEED* training for contractors on state projects.
- GA continues to track all state LEED projects and provides assistance as needed.
- GA worked with state agencies and universities to develop tracking processes and to collect relevant green building data as projects move through the design and construction process. Training is also provided to ensure success.
- GA is working with WSU – Extension, Energy Programs to develop a Post Occupancy Evaluation process and reporting format. A pilot effort is projected for October of 2009 to test the processes developed to date.
- GA, along with the Affected Agencies Committee (agencies affected by the LEED legislation), has developed an energy and water reporting spreadsheet that will be available on the GA web site by January 2010. This will be used by all universities and agencies to report actual performance of the LEED buildings per RCW 39.35D.030. The building information will come to GA and will be included in the biennial Green Building report provided to the Legislature and governor.
- During the 2009-11 Biennium, eight of the projects managed by GA (excluding DOC & DSHS) will be completed with a goal of achieving LEED Gold on three projects, LEED Silver on two and taking “not practicable” exemptions on the other three.

### **Challenges:**

- Project utility savings are determined when buildings are LEED certified and in operation for at least one year. Data on the first set of buildings will not be available until the summer of 2010.
- Reduced capital funding has impacted the support available to collect necessary data for the 2010 report and future projects pursuing LEED certification.



Tacoma Community College, Early Learning Center in Tacoma achieved LEED Gold

## GA Leased Facilities: New Facilities over 30,000 Square Feet

Year (FY)	2003	2004	2005	2006	2007	2008	2009
Conventional Buildings	4	6	4	2	0	0	0
LEED Certified	0	0	1	0	0	0	0
LEED Silver	0	0	0	0	1	1	0
LEED Gold or Higher	0	0	0	1		0	1
<b>Total</b>	<b>4</b>	<b>6</b>	<b>5</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>1</b>
% LEED Buildings	0%	0%	20%	33%	100%	100%	100%

### Progress to Date:

- Since 2005, GA has successfully worked with the development community to use LEED standards in private facilities that house state agencies. GA has also encouraged private building owners to implement sustainable practices, such as food composting.

Year	Facility	Square Feet	Estimated LEED Cost	Estimated Annual Energy Savings*	Estimated Annual Water Savings*
2008 (FY 09)	Parks & Recreation Commission LEED Gold (PSE Grant)	47,000	\$350,000 (\$59,000)	\$15,980	\$1,026
2008	Town Center III LEED Silver (PSE Grant)	48,000	\$145,000 (\$60,000)	\$17,280	\$1,045
2007	Attorney General Tumwater LEED Silver (PSE Grant)	131,000	\$516,200 (\$164,000)	\$45,850	\$1,645
2006	DSHS Cherry Street PSE Energy Conservation Grant	161,000	\$346,900 (\$193,000)	\$62,790	NA
2006	DOC - DOT Edna Goodrich Building LEED Gold (PSE Grant)	212,472	\$795,000 (\$266,000)	\$66,000	\$2,723
2005	Town Center II LEED Certified (PSE Grant)	130,733	\$393,000 (\$163,000)	\$47,064	\$2,031
	<b>Totals</b>	<b>730,205</b>	<b>\$1,641,100**</b>	<b>\$254,964</b>	<b>\$8,470</b>

\*Estimated values provided by project engineer.

\*\*Cost of LEED minus PSE Grants.

Overall, a 6.3-year payback was achieved on LEED with energy and water savings.

### Challenges/Next Steps

- Annual energy savings are estimated by the project engineer during the design phase of the project. The actual savings may vary depending on building operations and system settings.
- Determining the actual energy performance requires collecting utility data for at least one year after occupancy.
- Data collection for leased and owned facilities greater than 10,000 square feet is underway and will be available by mid-2010.

*LEED Gold*



Parks & Recreation Commission  
Parsons Plaza in Tumwater



Department of Corrections & Department of Transportation  
Edna L. Goodrich Building in Tumwater

*LEED  
Silver*



Attorney General Building  
In Tumwater



Department of Health  
Town Center 3 in Tumwater

*LEED  
Certified*



Department of Social & Health Services  
Cherry Street Plaza in Olympia

*Energy  
Star*



Department of Health  
Town Center 2 in Tumwater

# Transportation

## Goal 2

### Motor Pool Statewide Fleet Services

GA's Motor Pool fleet is the second largest in the state with 1,800 vehicles. Of these, almost half are fuel-efficient hybrid vehicles.

GA has surpassed its target for 30 mpg+ vehicles by more than 100%.

### Reduce Transportation Related Pollution.

Agency Objectives /Targets	Progress to Date (Measurables)
<b>2.1</b> 20% of GA's Motor Pool fleet will be rated to achieve 30 mpg or better and meet federal emission standards.	<ul style="list-style-type: none"> <li>51% of GA's fleet (894 vehicles) are hybrid vehicles that achieve 30 mpg or better and meet target EPA emission standards.</li> </ul>
<b>2.2</b> 15% improvement in fleet fuel efficiency (MPG) compared to the 2004 baseline.	<ul style="list-style-type: none"> <li>17.6% improvement in fleet fuel efficiency.</li> </ul>
<b>2.2.2</b> All purchases of four-wheel drive (4WD) vehicles must be approved by agency director, except those with fuel economy > 30 mpg or purchased for law enforcement or emergency response.	<ul style="list-style-type: none"> <li>No 4WDs purchased.</li> </ul>
<b>2.2.3</b> Give priority to fuel-efficient/low-emission vehicles	<ul style="list-style-type: none"> <li>23.5 mpg fleet average – 15.1% improvement.</li> <li>85% of the vehicles purchased (79 out of 91) are rated fuel efficient at 30 mpg or better.</li> </ul>

### Motor Pool Fleet Information:

Year (FY)	2004	2005	2006	2007	2008	2009
Petroleum	952,916	964,522	977,109	1,059,449	1,082,450	1,072,043
Fleet Vehicle Miles	19,062,204	19,359,633	20,210,823	24,228,053	25,438,685	25,222,095
Motor Pool-Owned Fleet Size	1,340	1,480	1,500	1,600	1,800	1,775
Fuel Efficiency (MPG)	20.0	20.07	20.68	22.87	23.5	23.5

**Comments:** 2007 was the first year that we separated GA miles from the total for the entire Motor Pool fleet. The 33 percent increase in fleet size is due to the transfer of 400 light duty vehicles from other agencies for fleet management. This transfer increased miles driven by 32 percent, but only increased fuel use by 17.6 percent due to a 15 percent improvement in the fuel efficiency of the fleet.

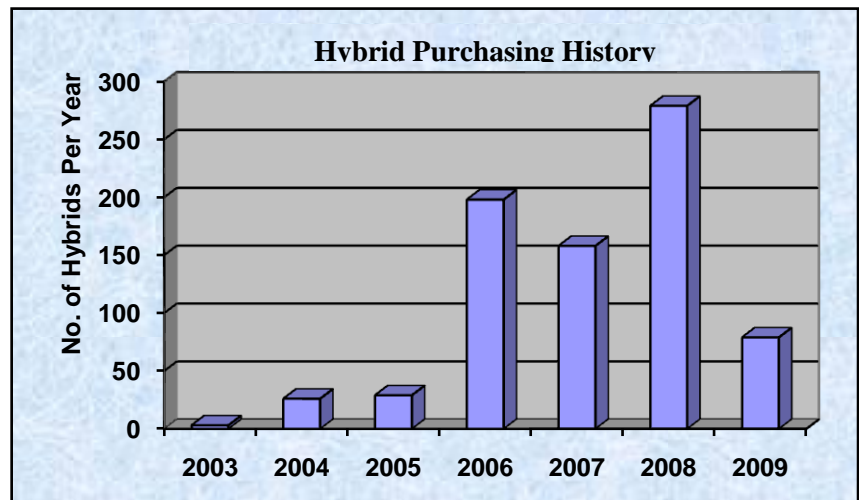


### Motor Pool fleet vehicles by type purchased each year:

Vehicle Type	2003	2004	2005	2006	2007	2008	2009
Camry-Hybrid							12
Toyota Prius Hybrids	3	26	29	69	46	177	1
Ford Escape Hybrids	0	0	0	129	112	102	66
Taurus/Stratus/ Impalas (Capable of using E-85)	65	99	85	84	38	38	0
Ford Taurus Wagon	7	15	12	0	0	0	0
Ford Explorers/Rangers/ (Capable of using E-85)	1	62	53	5	0	0	
Conventional (not rated fuel efficient)	18	8	0	28	37	7	10
4WD Vehicles					2	2	0
Total Purchases:	94	210	179	315	235	326	91



*Motor Pool Fleet has 894 hybrids. Hybrid vehicles are available to all public agencies through a state contract.*



### Progress to Date:

- Nearly 50 percent of the fleet is hybrid vehicles. Having more efficient vehicles contributes to lower emissions, cost savings and a reduction of the state's impact on the environment.

### Challenges:

- The scarcity of ethanol fueling stations in Washington makes it difficult for the state to use this alternative fuel.
- GA is able to track vehicles rented through the state-contracted vendor. However, we do not currently track data for vehicles rented from non-contracted commercial companies. While we do not estimate this to be a large volume of activity, it is a data gap.
- The equipment purchase freeze in FY09 slowed the transition to more fuel-efficient and hybrid vehicles.

# Transportation

## Goal 2

### GA Agency Only Fuel Usage

GA is balancing the need to provide quality services while helping the state reduce fuel use.

- Increased employee CTR participation.
- Increased fuel efficiency of agency vehicles.

Agency Objectives /Targets	Progress to Date (Measurables)
<b>2.3</b> 5% reduction in single-occupancy vehicle (SOV) rate through Commute Trip Reduction (CTR) Program.	<ul style="list-style-type: none"> <li>• 2009 survey showed a 3.1% decrease from 2003.</li> <li>• 19% increase in CTR trips compared to 2008; \$41,022 in incentives paid to GA employees.</li> </ul>
<b>2.4</b> 25% of total cars rented by GA from the state contracted commercial vendors will be economy/compact cars getting 30 mpg or better.	<ul style="list-style-type: none"> <li>• 46% of car rentals by GA employees were fuel-efficient economy/compact class. This exceeded the target of 25% and reflects an increase from the last progress report of 32%.</li> </ul>
<b>2.5</b> 20% of GA's diesel vehicles will use 5% biodiesel.	<ul style="list-style-type: none"> <li>• 100% of the diesel trucks (including the Building and Grounds (B&amp;G) program are using B-5 and are planning to convert to B-20 biodiesel.</li> </ul>
<b>2.5.1</b> Track miles driven by GA (FY 07 base year).	<ul style="list-style-type: none"> <li>• 24.2% decrease in miles.</li> </ul>
<b>2.5.2</b> Replace pre-1996 light-duty vehicles (those under 8,500 pounds gross vehicle weight) by January 2009.	<ul style="list-style-type: none"> <li>• B&amp;G has 60 light-duty vehicles that are pre-1996 models and exceed 2,000 miles driven. B&amp;G's FY 10 plan is to reduce its fleet by 30%, and purchase six electric vehicles.</li> </ul>

### GA Fuel Consumption (non-diesel) for Agency Use in Gallons:

Year (FY)	2003	2004	2005	2006	2007	2008	2009
Permanently Assigned Vehicles	Not Available	Not Available	Not Available	Not Available	63,939	54,731	42,850
Daily Rental Vehicles	Not Available	Not Available	Not Available	Not Available	2,638	2,976	2,816
Agency Owned Vehicles (AOV)	Not Available	Not Available	Not Available	Not Available	15,517	19,422	17,782
Personally Owned Vehicles (POV)	Not Available	Not Available	Not Available	Not Available	10,485	10,193	6,318
<b>Total</b>					<b>92,578</b>	<b>87,322</b>	<b>69,766</b>

- Consumption is tracked through the ComData Card system, which captures the majority of fuel. GA did not track its own fuel usage separately from the Motor Pool until 2007.
- The table above reflects a fuel savings of 5.7% since 2008 (current fleet size of 88 vehicles (74 light duty) as compared to 106 in 2008).

## GA Diesel Fuel Consumption for Agency Use

Year (FY)	2003	2004	2005	2006	2007	2008	2009
Ultra Low Sulfur (Highway)	Not Available	Not Available	Not Available	Not Available	8,538	12,043	7,312
Biodiesel	Not Available	Not Available	Not Available	Not Available	62,934	68,478	50,194
<b>Total</b>					<b>71,472</b>	<b>80,551</b>	<b>57,506</b>
Units	<input checked="" type="checkbox"/> gallons <input type="checkbox"/> liters						0

- GA's fuel consumption was not tracked separately from the Motor Pool prior to 2007.
- Materials Management Center (MMC) fuel use is tracked through WSDOT invoices (currently B-5 is available). The biodiesel number is the total amount of biodiesel blended fuel, not B100 gallons.)

## GA Miles Driven for Agency Use

Year (FY)	2003	2004	2005	2006	2007	2008	2009
Permanently Assigned Vehicles (GA MP Use)	Not Available	Not Available	Not Available	Not Available	974,723	685,076	650,436
Daily Trip Rental Vehicles (MP Use)	57,350	Not Available	Not Available	Not Available	73,769	68,208	97,384
Agency Owned Vehicles (AOV)	Not Available	Not Available	Not Available	Not Available	318,806 402,441	315,568 416,077*	121,110 283,532*
Personally Owned Vehicles (POV)	Not Available	254,936	211,760	88,134	212,228	206,514	129,514
<b>Total</b>		<b>254,936</b>	<b>211,760</b>	<b>88,134</b>	<b>1,981,967</b>	<b>1,691,443</b>	<b>1,281,976</b>
Units	<input checked="" type="checkbox"/> miles <input type="checkbox"/> kilometers (ComData reporting started in January of 2009)						

\* Reduced MMC miles due to less product delivery.

### Progress to Date:

- GA required the state-contracted rental car company to rent the most fuel-efficient vehicles as a first choice to state employees.
- B&G developed a fleet reduction plan to surplus it's older high-maintenance, less fuel-efficient vehicles and purchase six electric vehicles from savings realized by the fleet reduction.

### Commute Trip Reduction (CTR) program:

GA has managed the CTR program for state agencies for the past 18 years. This program was transferred to WSDOT in July 2009. The program goal is to reduce traffic congestion, air pollution and fuel consumption by encouraging public employees to reduce single-occupancy vehicle miles by using alternative modes of transportation. The following are two key components of the program for state employees:

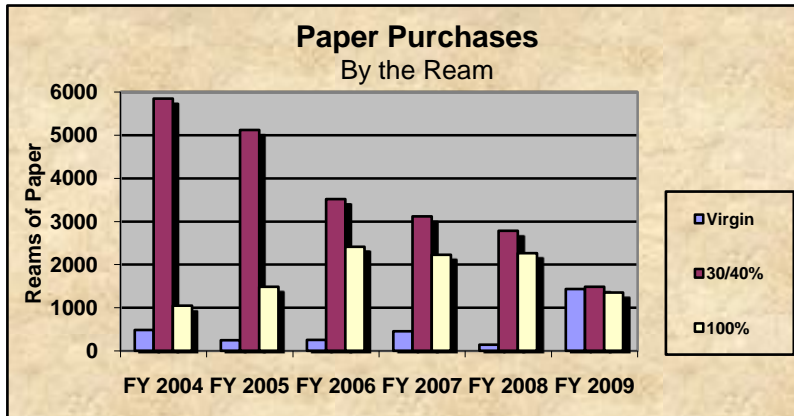
- A guaranteed ride home program for state employees in Thurston, Pierce, King and Spokane counties who use alternative modes of transportation for commuting to work.
- Fare-free transit passes for state employees assigned to a work site in Thurston County.

# Recycling and Waste

## Goal 3

GA has the highest recycle rate of any program in the state.

- Significantly reduced office paper use.
- All janitorial paper has 50% recycled content.



GA has reduced paper use by 42%, and increased use of 100% recycled content paper by 32% from 2004 levels.

### GA Internal Agency Use - Maximize recycling, and minimize waste

Agency Objectives /Targets	Progress to Date (Measurables)
<b>3.1</b> 10% reduction of office paper use per employee (FY 04 base year).	<ul style="list-style-type: none"> <li>• 64% reduction in paper use per employee.</li> <li>• 42.1% reduction in overall paper purchased.</li> </ul>
<b>3.2</b> 50% of copy paper purchased by GA for agency use will be 100% recycled content (white 8½x11).	<ul style="list-style-type: none"> <li>• 31.7% of all copy paper purchased in FY 09 was 100% recycled content.</li> </ul>
<b>3.3</b> 80% of all paper will be recycled.	<ul style="list-style-type: none"> <li>• 95% of all paper is recycled.</li> </ul>
<b>3.4</b> 30% of janitorial paper products will be of 50% recycled content and processed chlorine free.	<ul style="list-style-type: none"> <li>• All of janitorial paper is 50% recycled content and processed chlorine free. We are currently using 85% post-consumer content bath tissue.</li> </ul>
<b>3.5</b> 60% of solid waste in GA's campus operations will be recycled. (Solid waste refers to discarded materials we remove; materials are recycled or sent to the landfill (garbage).	<ul style="list-style-type: none"> <li>• 54% of solid waste collected campus-wide was recycled in 2008, saving \$74,224 in landfill fees.</li> </ul>
<b>3.6</b> Study the potential for composting food wastes from GA-managed buildings. The goal is to expand composting to all buildings on campus.	<ul style="list-style-type: none"> <li>• Results from a pilot program at NRB reduced total building waste by 15% compared to 2008. Food composting will be available in all campus buildings by the end of December 2009.</li> </ul>



## Office Paper Purchased (8.5 x 11)

Year (FY)	2003	2004	2005	2006	2007	2008	2009
<i>Employee Count</i>		707	646	678	686	659	637
Virgin	NA	478	247	252	454	142	1,432
30 - 40% recycled	NA	5,841	5,116	3,517	3,112	2,779	1,480
100% recycled/EPP	NA	1,042	1,493	2,412	2,225	2,260	1,352
Total		7,361	6,846	6,181	5,791	5,181	4,264
% reduced per employee			6.4%	19.5%	25.5%	25.2%	42.1%
Units	<input type="checkbox"/> sheets <input checked="" type="checkbox"/> reams <input type="checkbox"/> cases <input type="checkbox"/> tons (FY 03 numbers not available)						

**Comments:** Increase in virgin paper use may be attributed to transition from Central Stores to Office Depot contract. Purchasing virgin paper is now blocked for GA on the state contract.

## Waste Disposed in GA and on Capitol Campus

Year (FY)	2003	2004	2005	2006	2007	2008	2009
On Campus	Not Available	41% Landfill 59% Recycled	41% Landfill 59% Recycled	41% Landfill 59% Recycled	45% Landfill (972) 55% Recycled (1,147)	46% Landfill (887) 54% Recycled (1,034)	46% Landfill (794) 54% Recycled (928)
Surplus Programs	45 - Scrap	Not Available	Not Available	Not Available	138 - Scrap	481 - Recycled Metal 49 - Landfill	238 - Recycled Metal 326 - Landfill
Units	<input type="checkbox"/> pounds <input checked="" type="checkbox"/> tons <input checked="" type="checkbox"/> Prior to 2006 was reported in %						

**Comments:** On campus recycled materials are not tracked separately.

### Progress to Date:

- Electronic forms are used instead of paper as a standard business practice.
  - GA recycles 99 percent of all office paper, reducing landfill waste by over 900 tons.
  - The Surplus Program evaluates all unusable materials to see if any part can be recycled before disposal.
  - Capitol Campus automatic paper towel dispensers have reduced paper use by 25%.
  - Building and Grounds (B&G) plans to purchase a scale to separate the weight of recycled materials.
  - GA recycles cardboard, metal, cans, plastic and glass bottles, and wood pallets. GA also recycles dry cell batteries, fluorescent lamps and ballasts, tires, oil filters, used oil, car batteries, vehicle parts, cleaning solvents, ceiling tile, and printer and fax cartridges.
  - GA's compost pilot program that began in January is being adopted throughout the Capitol Campus. The cash savings on landfill tipping fees after paying for compost hauling is nearly \$7,000 for a six-month period.
- Legislative approval of SHB 2287 will require state agencies to purchase 100% recycled content paper only, which could drive the cost down of purchasing recycled paper.

### Challenges:

- Having adequate resources to provide enough recycling bins and for educating tenants about the benefits of recycling make it difficult to reach the goal of 60% recycling rate.

# Energy and Water

## Goal 4

GA is a leader in energy and water efficiency, using Energy Savings Performance Contracting services to help state agencies, school districts and local governments cut energy and water use.

- Continue to reduce irrigation and interior water consumption from 2003 levels.
- Initiating Energy Star and LEED standards for buildings on the Capitol Campus.

### Minimize facility related energy and water use

GA-owned and operated facilities consist of 3,334,637 square feet.

Agency Objectives /Targets	Progress to Date (Measurables)
<b>4.1</b> 5% reduction of energy use on a square footage basis in GA-managed, state-owned and operated facilities.	• 3% increase in energy use (gas and electricity) compared to 2003 levels (see chart comments below).
<b>4.2</b> 10% reduction of potable water use for GA managed grounds. (2004 baseline).	• 45% reduction in the use of potable water for irrigation.
<b>4.3</b> 10% reduction of interior potable water use per square foot (2004 baseline).	• 23% reduction in the use of potable water for interior water.
<b>4.4</b> Pursue installing a renewable energy project and/or purchase 5% green power for a GA-owned and managed project.	• 12.5% of electricity used for GA facilities comes from green power, and from the Legislative Building's solar panels.
<b>4.5</b> 100% of existing Capitol Campus buildings will use Energy Star tracking.	• Plan is 75% complete, now collecting energy consumption data for July 2010 due date.
<b>4.6</b> 100% of leased buildings will obtain an Energy Star rating.	• Currently agencies are entering data for facilities above 10,000 sq. ft. into the Energy Star portfolio manager program.
<b>4.7</b> 5% increase in annual energy savings from Energy Performance Contracting.	• 29% annual energy savings achieved compared to 2005.

#### Progress to Date:

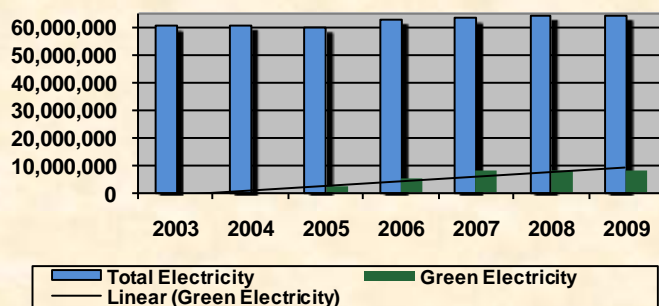
- Established separate energy monitoring for most Capitol Campus buildings, which has led to improved data tracking.
- GA is implementing the metering of energy and water by building as required for all state LEED projects.
- A study is in progress to evaluate the conversion of the current steam system on the Capitol Campus to a low-temperature hot water system to conserve energy.
- The Legislative Building solar panels added to the south side of the roof continue to produce 20,000 kilowatt-hours of energy per year.
- Evaluating energy conservation opportunities on leased properties prior to lease negotiations and re-negotiations.
- Installed cubicle sensors and motion sensors in various areas in GA and around the campus to reduce energy use when occupants are away from workstations.
- All agency computer monitors go into a "sleep" mode after a period of inactivity. All computers have Energy Star rating and contracted appliances are EPA Energy Star.

## Total electricity used in GA-managed, state-owned and operated facilities

Year (FY)	2003	2004	2005	2006	2007	2008	2009
Conventionally Purchased	60,148,092	60,530,678	63,016,881	57,893,473	53,516,509	56,177,165	56,033,943
Green Electricity	NA	NA	2,410,000	4,820,000	8,020,000	8,020,000	8,020,000
<b>Total</b>	<b>60,148,092</b>	<b>60,530,678</b>	<b>65,426,881</b>	<b>62,713,473</b>	<b>62,988,450</b>	<b>64,197,165</b>	<b>64,053,943</b>
Units	<input checked="" type="checkbox"/> kWh <input checked="" type="checkbox"/> One GA off-campus facility was overstated in 2005						

**Comments:** Increased staffing and office equipment on campus since 2003 has resulted in more energy use. Additionally, the steam absorption chillers on campus were switched over to electrical chillers to save on operational costs.

**Electrical Use (kWh) For GA Facilities**



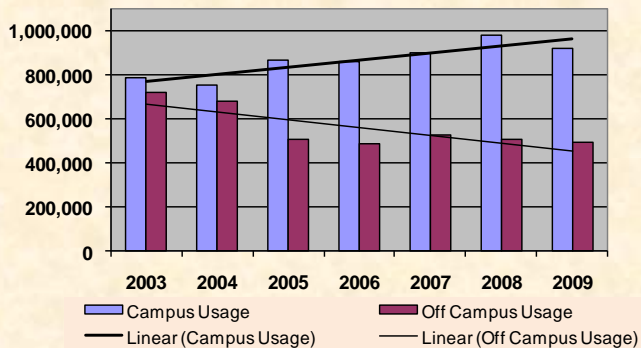
Consumption of electricity in 2009 has gone up compared to the 2003 base year, but decreased slightly compared to 2008 usage.

## Natural gas for GA-managed, state-owned and operated facilities

Year (FY)	2003	2004	2005	2006	2007	2008	2009
On Campus	787,069	750,977	865,918	862,321	901,668	980,325	921,888
Off-Campus	719,588	678,972	508,258*	487,997	529,605	507,173	493,445
<b>Total</b>	<b>1,506,657</b>	<b>1,429,949</b>	<b>1,374,176</b>	<b>1,350,318</b>	<b>1,419,051</b>	<b>1,487,498</b>	<b>1,415,333</b>
Units	<input checked="" type="checkbox"/> Therms <input type="checkbox"/>						

**Comments:** No emergency fuel use purchases were made this year for propane or diesel.

**Natural Gas (Therms) Use for GA Facilities**



Consumption of natural gas has increased compared to the 2003 base year but has decreased by 4.9% compared to 2008 usage.

**Comments:** Aging building control systems, with some buildings operating 24 hours a day and additional staffing have contributed to increased consumption from 2003 levels on campus. In 2008, steam leaks on campus caused additional natural gas consumption. Since 2007, GA's Resource Conservation Manager implemented best practices to reduce building energy consumption.

**Challenges:**

- 3% increase in energy use (gas and electricity) compared to 2003 levels.
- The GA Building was not fully occupied in 2003. It is fully occupied now, which accounts for some of the increase in campus energy use.

**Water Consumption on Capitol Campus**

Year (FY)	2004	2005	2006	2007	2008	2009
Domestic Interior	42,708,930	NA	NA	36,443,457	32,803,412	32,741,644
Irrigation (Potable Water)	22,139,289	NA	NA	20,773,044	11,660,303	11,026,358
Reclaimed Water (Purple Pipe)		NA	NA	NA	560,693	1,098,408
Total	64,848,219	NA	NA	57,216,501	45,024,411	44,866,410
Units	<input checked="" type="checkbox"/> Gallons <input type="checkbox"/> Cubic Feet					

**Comments:** The Resource Conservation Manager is tracking all water accounts on the Capitol Campus which now includes 43 water accounts compared to the 34 accounts previously reported from the 2004 base year. FY 2004 base was adjusted to include the same number of accounts to maintain consistency.

**Water Conservation Progress to Date:**

- GA completed a water conservation project in 2009 that will reduce water consumption by an estimated 25%, saving 11 million gallons and \$71,000 annually. The project installed high-efficiency plumbing fixtures in nearly all campus buildings and made upgrades to the campus irrigation system.
- 23% reduction in potable water use in Capitol Campus buildings compared to 2004.
- Efficiency measures identified in the Capitol Campus water audit began in the fall 2008.
- Ability to use Energy Savings Performance Contracting for water conservation projects has helped increase water saving projects.
- On-going efforts to add separate water meters for each campus building to track domestic, irrigation and cooling tower water usage. Domestic water is currently used for all interior buildings and includes; water fountains, sinks, toilet flushing and the cooling tower.
- GA began using reclaimed water in 2007 to irrigate Heritage Park, Marathon Park and along Deschutes Parkway. DOT and the John L. O'Brien buildings are plumbed for reclaimed water for future expansion to the Capitol Campus.



## GA Energy Conservation Program Description:

Energy Savings Performance Contracting (ESPC) provides a way to use utility savings to pay for energy upgrades in existing buildings. The program has helped state agencies, universities, community colleges and school districts throughout the state reduce electricity consumption by about 177 million kilowatts since projects began in 1986. That is enough electricity to power about 13,500 homes annually, helping taxpayers avoid about \$77 million in utility costs.

### Energy Savings in Public Facilities

Quarter 1 FY '09	July-September 2007	Total	4,575,089 kWh
Quarter 2 FY '09	October-December 2007	Total	4,456,835 kWh
Quarter 3 FY '09	January-March 2008	Total	4,655,398 kWh
Quarter 4 FY '09	April - June 2008	Total	7,609,104 kWh
<b>Total For FY '09</b>			<b>21,296,426 kWh</b>
<i>*Energy Savings are annual savings from projects completed in FY 09</i>			

**Comments:** The total electricity savings in state-owned buildings for 2009 is equal to the amount of energy used by about 1,578 homes annually.

### Additional GA Energy Program Services:

- **The Energy Life-Cycle Cost Analysis (ELCCA)** encourages energy efficiency in new construction by evaluating the total cost of ownership of several competing design alternatives. Approximately 75 projects go through this process annually.
- **Resource Conservation Management (RCM)** focuses on reducing energy and water costs on the Capitol Campus. Savings will be realized through changes in building occupant behavior, improvements in maintenance practices, educational programs and catching billing errors.
- **Building Commissioning** ensures that building systems are operating according to design, which can save thousands of dollars in operating costs for new and existing buildings.

# Reduce Toxins

## Goal 5

Environmentally preferred products and services are available to our clients through GA-managed state contracts.

- Added four new contracts for FY 2009.
- Increased use of green cleaning products on the Capitol Campus.

### Reduce use of toxic products and toxic chemicals

Agency Objectives /Targets	Progress to Date (Measurables)
<b>5.1</b> Office of State Procurement will add three new Environmentally Preferred Products/Services (EPP) contracts each year.	Four new EPP contracts have been added: <ul style="list-style-type: none"> <li>• Contract #02605, includes organic lawn fertilizers (9/08)</li> <li>• Contract #05208, Vehicles, 2009 Cargo Vans (11/08)</li> <li>• Contract #00707, Emergency Standby Services (2/09)</li> <li>• Contract #01509, Scrap Metal Collection and Recycling Services (2/09)</li> </ul>
<b>5.2</b> 50% of GA janitorial products used will be Green Seal approved or equivalent.	<ul style="list-style-type: none"> <li>• 66% of janitorial products used daily on the Capitol Campus for cleaning are Green Seal or equivalent. (2 of the 3 daily cleaners used are Green Seal approved).</li> </ul>
<b>5.3</b> Eliminate all persistent toxins in GA-managed landscaping and reduce overall toxins by 30% below 2003 levels.	<ul style="list-style-type: none"> <li>• GA has reduced toxic chemical use on the campus by 100% compared to 2003 base year and does not use persistent toxins.</li> </ul>

\*Persistent toxins are defined as a substance that remains mostly unchanged in the environment, "travels" up the food chain and are poisonous to animals and or plants.

#### Progress to Date:

- Working with Department of Ecology to educate and train customer agency buyers about the use of environmentally preferred products.
- The GA Annual Training and Tradeshow promotes sustainability by offering environmentally preferable purchasing training to agency customers. Sustainability was the theme of our 2009 show.
- State Procurement offers an online purchasing reference guide for environmentally preferred products.
- State Procurement has drafted a work plan, with the Department of Ecology, to identify and prioritize environmentally friendly contracts and performance measures.
- GA painters use paints with low volatile organic compounds to reduce health and environmental risks.
- GA bid and lease documents include language prohibiting the purchase and require the recycling of materials with known hazardous toxins per Executive Order 04-01.

#### Challenges:

- Creating contracts that balance environmentally friendly characteristics with other factors, such as cost and supplier diversity.
- Educating and working with customers to understand their needs and to address concerns about real or perceived cost differences between environmentally friendly products and other ones.

# Education & Outreach

As a leader in sustainability, GA strives to be a model agency for the public sector. Products and services provided to our clients will help them meet their sustainability goals.

## **Progress to Date:**

Sustainable efforts are being integrated where feasible at every level of GA. The following are ways GA communicates its sustainability efforts:

- Sustainability plan will be reviewed and revised annually by GA director and management team. Goals will be assessed and projected out for the next biennium.
- Divisions report quarterly on progress towards Strategic Plan objectives, and review and revise annually when appropriate.
- State Procurement sends out regular broadcasts to customers announcing new contracting opportunities for improving sustainability efforts.
- GA's annual tradeshow, attended by about 650 customers and 400 vendors, includes several Environmentally Preferable Purchasing (EPP) training courses. Sustainability was the theme of this year's show.

## **Additional Notes:**

GA educates its employees and customers about sustainability and environmental policies by:

- Developing a sustainable Office Practices guideline.
- Encouraging each employee to do their part in implementing sustainable practices by printing and copying two-sided, using filtered instead of bottled water, using recycled content office products, green cleaning, and carpooling and other CTR methods.
- Sharing sustainable information, practices, and procedures with state agency facility coordinators at Quarterly Facility Services Advisory Board meetings.

GA is leading by example to motivate positive changes in the following areas:

**Green Building:** GA is a leader in the public-sector use and promotion of Green Building practices. GA's Green Building advisor participates in presentations for numerous public sector events and works with other states to help them establish similar programs. GA has also teamed up with the Department of Ecology to provide Green Building training for contractors of state projects. GA provides free Green Building training to other agency project managers interested in becoming a LEED-accredited professional.

**Resource Conservation Management:** GA's Resource Conservation Manager is working to save even more energy and water, and improving recycling efforts on the Capitol Campus. This model is getting attention from other state agencies that are interested in emulating this program.

**Green Cleaning:** GA's Green Cleaning program is seen as a model for other state agency custodial programs. GA's custodial manager makes presentations at many public-sector events, detailing the benefits and attributes of GA's Green Cleaning program.

**Efficient Motor Pool & Hybrid Vehicle Contract:** GA is a leader in the use hybrid vehicles in its fleet. This, along with the state contract for hybrid vehicles, is a model for other public agencies.

# Future Goals

Task List For 20 Year Goals		
	Goals	Objectives Year 2028
Goal 1	Implement Sustainable Building Practices	<p><b>1.1</b> 50% of new and major renovation, state-owned, GA-managed projects will be LEED Gold (the second-highest national design guidelines rating by the U.S. Green Building Council).</p> <p><b>1.2</b> 50% of new and major renovation, GA leased projects will be certified to LEED Silver for projects over 30,000 sq. ft.</p> <p><b>1.3</b> Maintain LEED Silver rating for all existing buildings on the Capitol Campus over 10,000 sq. ft.</p>
Goal 2	Reduce Transportation Associated Pollution	<p><b>2.1</b> 90% of GA's Motor Pool rental vehicle fleet will be rated to achieve 30 mpg or better.</p> <p><b>2.2</b> 50% reduction per vehicle mile of fuel used by Motor Pool vehicles compared to the 2003 baseline.</p> <p><b>2.3</b> 15% reduction in GA employee single-occupancy vehicle (SOV) use through Commute Trip Reduction (CTR) Program.</p> <p><b>2.4</b> 90% of daily rental cars by GA will be economy/compact class (&gt;30 mpg).</p> <p><b>2.5</b> 95% of GA's diesel vehicles will use 20% biodiesel.</p>
Goal 3	Maximize Recycling, Minimize Waste and Use of Products with 100% Virgin Materials	<p><b>3.1</b> 50% reduction in office paper use per GA employee compared to 2004 baseline.</p> <p><b>3.2</b> 100% of copy paper purchased by GA will be 100% recycled content.</p> <p><b>3.3</b> 99% of GA office paper will be recycled.</p> <p><b>3.4</b> 100% of janitorial paper products purchased by GA will be of 70% recycled content and chlorine free, if available in the market.</p> <p><b>3.5</b> 90% of all solid waste in GA and GA managed facilities will be recycled.</p> <p><b>3.6</b> 50% of food waste from GA managed buildings will be composted.</p>
Goal 4	Minimize Facility Related Energy and Water Use	<p><b>4.1</b> 50% reduction of energy use on a square footage basis in state-owned and state operated facilities compared to 2003 baseline.</p> <p><b>4.2</b> 100% reduction of potable water use for GA managed grounds (2004 baseline).</p> <p><b>4.3</b> 50% reduction of interior potable water use per square foot compared to 2003 baseline.</p> <p><b>4.4</b> Install 15 renewable energy projects and/or purchase 30% Green Power for the GA-owned and managed projects.</p> <p><b>4.5</b> Energy Star rating (80) for all buildings on the Capitol Campus.</p> <p><b>4.6</b> Achieve Energy Star rating (75) for all GA-managed leased bldgs.</p> <p><b>4.7</b> Increase energy saving from Energy Performance Contracting by 40% compared to 2005 baseline.</p>
Goal 5	Reduce Use of Toxic Products and Use of Toxic Chemicals	<p><b>5.1</b> State Procurement will add a minimum of three Environmentally Preferred Products/Services (EPP) contracts each year.</p> <p><b>5.2</b> 95% GA janitorial products used in GA-managed facilities will be Green Seal approved or equivalent.</p> <p><b>5.3</b> Reduce overall toxins by 95% below 2003 levels in GA-managed landscaping.</p>



# Achievements

## 2009

- Started a food composting pilot at the Natural Resources Building, diverting over 25 tons from the landfill in the first three months. The entire Capitol Campus will be composting by the end of December 2009. Overall, 200 tons of composting material on the Capitol Campus have been diverted from landfills. The composting material is turned into a beneficial product for lawns and gardens through a partnership with a private firm.
- Four new environmentally preferred products/services contracts became available in FY09
- Took steps to strengthen relationship with Ecology, such as meetings and development of a draft work plan.
- Increased the number of economy/compact cars rented by GA from 32% (last progress report) to 46% (FY09 progress report).
- Negotiated the addition of Grays Harbor 100% recycled content office paper to the existing office supplies contract with Office Depot in May 2009.

## 2008

- GA's Energy Team was a finalist for the 2008 Governor's Award for Sustainable Practices.
- GA's Energy Team worked with 2007 Legislature to add water conservation projects to state law (RCW 39.35A) on Energy Performance Contracting.

## 2007

- GA Motor Pool reached a total of 894 hybrid vehicles, representing 51% of the entire fleet.
- The combination of hybrid and alternate fuel (E85) vehicles equals 93% of the fleet, the highest percentage of any state fleet in the nation.

## 2006

- The Northwest Energy Coalition recognized the GA Energy Program manager for his team's multi-year effort that cut electricity and natural gas use in half on the Capitol Campus.

## 2005

- GA presented the assistant director of Buildings and Grounds with an award of appreciation for his leadership, dedication and work in making the Capitol Campus the most energy-efficient campus in the nation.

## 2004

- GA's Energy Team worked with five client agencies to receive the Governor's Energy Efficiency awards.